

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of producing a molten iron having a carbon content of 3.0 mass% or more, comprising:

feeding a raw material mixture containing a carbonaceous reducing agent, an iron oxide-containing material and a CaO-containing material onto a hearth of a moving-hearth reducing furnace;

heating the raw material mixture in the reducing furnace and thus reducing an iron oxide in the raw material mixture;

generating a solid reduced iron having a metallization ratio of 80% or more;

feeding another amount of CaO-containing material into a melting furnace;

feeding the solid reduced iron in the state kept at high temperature into a melting furnace and further heating the solid reduced iron therein; and

reducing an iron oxide partially remained in the solid reduced iron and melting the solid reduced iron;

wherein the CaO-containing material is blended in the raw material mixture, and the amount of CaO-containing material fed into the melting furnace in an amount of is not more than 40 kg per ton of molten iron; and

wherein the total amount of the CaO-containing material blended in the raw mixture and the CaO-containing material fed into the melting furnace needed to adjust is adjusted such that a basicity of a slag generated in the melting furnace is becomes 1.1 or more.

Claim 2 (Original): The method of producing a molten iron according to Claim 1, further comprising:

feeding a powdery carbonaceous material onto the hearth of the moving-hearth reducing furnace as a hearth material; and

feeding the raw material mixture containing a carbonaceous reducing agent, an iron oxide-containing material and a CaO-containing material onto the hearth material.

Claim 3 (Original): The method of producing a molten iron according to Claim 2, wherein

an amount of the carbonaceous material fed as the hearth material onto the hearth of the moving-hearth reducing furnace is 30 kg or more per ton of the molten iron obtained in the melting furnace.

Claim 4 (Previously Presented): The method of producing a molten iron according to Claim 2, wherein

the feeding amount of the carbonaceous material for the hearth material is adjusted in such a manner

that an amount of the CaO-containing material blended in the raw material mixture is sufficient for making the basicity of the slag generated in the melting furnace 1.1 or more and

that an amount of the carbonaceous material of a non-combustion state fed into the melting furnace together with the solid reduced iron discharged from the reducing furnace in a non-combustion state becomes not less than an amount of the carbonaceous material to be consumed in the melting furnace.

Claim 5 (Previously Presented): The method of producing a molten iron according to Claim 3, wherein

the feeding amount of the carbonaceous material for the hearth material is adjusted in such a manner .

that an amount of the CaO-containing material blended in the raw material mixture is sufficient for making the basicity of the slag generated in the melting furnace 1.1 or more and

that an amount of the carbonaceous material of a non-combustion state fed into the melting furnace together with the solid reduced iron discharged from the reducing furnace in a non-combustion state becomes not less than an amount of the carbonaceous material to be consumed in the melting furnace.

Claim 6 (Previously Presented): The method of producing a molten iron according to Claim 1, wherein

a MgO content in the raw material mixture and an amount of the MgO to be added into the melting furnace are adjusted in such a manner that

the slag generated in the melting furnace has a MgO content of 6 mass% or more.